AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Previously Presented) A container designing system that uses a computer to design a shape of a hollow container, comprising:

a parametric input module for inputting a parametrically defined shape condition;

a storage module for storing said shape condition;

a solid model definition module for defining a three-dimensional outer shape of said hollow container as a solid model that is at least partially filled with contents on the basis of said shape condition; and

a solid model editor module for subjecting said solid model to a secondary processing.

2. (Original) A container designing system as set forth in claim 1, wherein said solid model is subjected to a secondary processing after an outer shape of said hollow container is defined as a solid model.

3. (Previously Presented) A container designing system as set forth in claim 1, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a Boolean operation for altering a shape upon calculating one of a logical sum (OR), a logical difference (XOR) or a logical product (AND) of two shapes.

4. (Previously Presented) A container designing system as set forth in claim 1, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a fillet operation for rounding an intersecting portion of one plane with the other plane.

5. (Previously Presented) A container designing system as set forth in claim 1, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a deformable operation for altering a plane such that one of a positive load or a negative load is applied to the plane.

6. (Previously Presented) A container designing system as set forth in claim 1, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a spiral operation for generating a continuous spiral shape on an exterior surface of said hollow container that protrudes a distance from said exterior surface in an arbitrary range of an axial direction.

7. (Previously Presented) A container designing system as set forth in claim 1, further comprising a capacity modulation module for performing a shape modulation upon said outer shape in order that a container capacity after a shape modulation has a capacity determined by said shape condition.

8. (Currently Amended) A container designing system as set forth in claim 1, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said outer shape is subjected to a secondary processing.

9. (Currently Amended) A container designing system as set forth in claim 7, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said shape modulation is performed on said outer shape.

10. (Previously Presented) A container designing method that uses a computer to design a shape of a hollow container, wherein a parametrically defined shape condition is inputted and a three-dimensional outer shape of said hollow container is defined as a solid model that is at least partially filled with contents on the basis of said shape condition and wherein said solid model is subjected to a secondary processing.

11. (Previously Presented) A container designing method as set forth in claim 10, wherein said solid model is subjected to a secondary processing that comprises a Boolean operation for altering a shape upon calculating one of a logical sum (OR), a logical difference (XOR) or a logical product (AND) of two shapes.

12. (Previously Presented) A container designing method as set forth in claim 10, wherein said solid model is subjected to a secondary processing that comprises a fillet operation for rounding an intersecting portion of one plane with the other plane.

13. (Previously Presented) A container designing method as set forth in claim 10, wherein said solid model is subjected to a secondary processing that comprises a deformable operation for altering a plane such that one of a positive load or a negative load is applied to the plane.

14. (Previously Presented) A container designing method as set forth in claim 10, wherein said solid model is subjected to a secondary processing that comprises a spiral operation for generating a continuous spiral shape on an exterior surface of said hollow container that protrudes a distance from said exterior surface in an arbitrary range of an axial direction.

15. (Original) A container designing method as set forth in claim 10, wherein a shape modulation upon said outer shape is performed in order that a container capacity after a shape modulation has a capacity determined by said shape condition.

16. (Currently Amended) A container designing method as set forth in claim 10, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said outer shape is subjected to a secondary processing.

17. (Currently Amended) A container designing method as set forth in claim 15, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said shape modulation is performed on said outer shape.

18. (Previously Presented) A container designing system, comprising:

a computer-readable medium that is encoded with a container designing program, wherein the container designing program includes:

a parametric input module for inputting a parametrically defined shape condition;

a storage module for storing said shape condition;

a solid model definition module for defining a three-dimensional outer shape of a hollow container as a solid model that is at least partially filled with contents on the basis of said shape condition; and

a solid model editor module for subjecting said solid model to a secondary processing; and

a computer that communicates with said computer-readable medium and that executes said container designing program.

19. (Previously Presented) A container designing system as set forth in claim 18, wherein said solid model is subjected to a secondary processing after an outer shape of said hollow container is defined as a solid model.

20. (Previously Presented) A container designing system as set forth in claim 18, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a Boolean operation for altering a shape upon calculating one of a logical sum (OR), a logical difference (XOR) or a logical product (AND) of two shapes.

21. (Previously Presented) A container designing system as set forth in claim 18, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a fillet operation for rounding an intersecting portion of one plane with the other plane.

22. (Previously Presented) A container designing system as set forth in claim 18, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a deformable operation for altering a plane such that one of a positive load or a negative load is applied to the plane.

23. (Previously Presented) A container designing system as set forth in claim 18, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a spiral operation for generating a continuous spiral shape on an exterior surface of said hollow container that protrudes a distance from said exterior surface in an arbitrary range of an axial direction.

24. (Previously Presented) A container designing system as set forth in claim 18, further comprising a capacity modulation module for performing a shape modulation upon said outer shape in order that a container capacity after a shape modulation has a capacity determined by said shape condition.

25. (Currently Amended) A container designing system as set forth in claim 18, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said outer shape is subjected to a secondary processing.

26. (Currently Amended) A container designing system as set forth in claim 24, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said shape modulation is performed on said outer shape.

27. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program, wherein said container designing program is executed by a computer and wherein said container designing program includes:

a parametric input module for inputting a parametrically defined shape condition;

a storage module for storing said shape condition;

a solid model definition module for defining a three-dimensional outer shape of a hollow container as a solid model that is at least partially filled with contents on the basis of said shape condition; and

a solid model editor module for subjecting said solid model to a secondary processing.

28. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein said solid model is subjected to a secondary processing after an outer shape of said hollow container is defined as a solid model.

29. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a Boolean operation for altering a shape upon calculating one of a logical sum (OR), a logical difference (XOR) or a logical product (AND) of two shapes.

30. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a fillet operation for rounding an intersecting portion of one plane with the other plane.

31. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a deformable operation for altering a plane such that one of a positive load or a negative load is applied to the plane.

32. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein said solid model editor module subjects said solid model to a secondary processing and wherein said secondary processing includes a spiral operation for generating a continuous spiral shape on an exterior surface on said hollow container that protrudes a distance from said exterior surface in an arbitrary range of an axial direction.

33. (Previously Presented) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, further comprising a capacity modulation module for performing a shape modulation upon said outer shape in order that a container capacity after a shape modulation has a capacity determined by said shape condition.

34. (Currently Amended) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 27, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said outer shape is subjected to a secondary processing.

35. (Currently Amended) A computer-accessible recording medium that is encoded with a container designing program as set forth in claim 33, wherein a shape of a finished ~~finish~~ portion of said hollow container remains fixed when said shape modulation is performed on said outer shape.